Technical Area: Cultural Resources
Technical Leads: Michael McGuirt and Sarah Allred

WORKSHOP REQUEST

21. An archaeological site has been identified in the Controlled Area. Will the Controlled Area have a fence or barrier? Please explain how HECA will control future uses of the land in the Controlled Area.

RESPONSE

Hydrogen Energy California LLC (HECA LLC) intends to limit public access to the Controlled Area; however, the specific means for doing so have not yet been determined. In the event that a fence or physical barrier is proposed, the Applicant will provide the proposed design and construction methods to the CEC for review. HECA LLC currently has no plans to use the Controlled Area for any use other than the current agricultural use. HECA LLC will seek CEC review and approval of any proposed use of the Controlled Area that is more intensive than agricultural production.

WORKSHOP REQUEST

22. Please evaluate any unevaluated archaeological sites that cannot be avoided by the HECA Project for eligibility for inclusion on the California Register of Historic Resources.

RESPONSE

As mentioned previously, it is the Applicant's plan to avoid all cultural resources. In the event that a site cannot be avoided due to avoidance of other resource areas (e.g., biological resources), the Applicant commits to evaluating for eligibility, prior to the final project approval, any unevaluated archaeological sites that may be affected.

WORKSHOP REQUEST

23. Please design an geoarchaeological field study that includes soil profiling within the Project Site where the deepest trenching would occur, and along the linears at old stream or water crossings. The CEC proposes a sampling of ten to 20 percent of old stream or water crossings along the linears

RESPONSE

At the Project Site, the Applicant will conduct geoarchaeological soil profiling and characterization concurrently and in conjunction with requisite geotechnical investigations. The focus of this effort will be to characterize subsurface depositional sequences and identify paleosols and/or stable buried land surfaces that are of appropriate age and depositional character to potentially preserve buried archaeological resources. Archival research (documented in the responses to CEC Set One Data Requests Nos. 77 through 79) indicates that there is a potential for buried archaeological resources, based on the general environmental setting and depositional history of the Project Site vicinity. Once a development plan has been finalized for the Project Site, an exploration plan for the combined geotechnical/ geoarchaeological investigations will be developed, focusing on those areas with the deepest project impacts. Depending on site conditions, subsurface explorations may include mechanical trenching and/or direct-push coring. Based on these explorations, a representative number of measured profile drawings will be completed for the Project Site. If paleosols are observed, radiometric dating techniques may be used to better characterize the potential for buried archaeological resources. During trenching activities, at least one additional archaeologist will be on site to assist in the monitoring and sorting of spoils excavated from the geoarchaeological trenches. Rakes and other hand tools will be used to actively sort through material as it is excavated from each trench.

Along the linear alignments, the Applicant will commit to send the CEC-approved geoarchaeologist to profile and characterize exposed sediments for a representative sampling (approximately 20 percent) of old stream channels or water crossings. Once engineering and design (including the proposed depths of the linear components under consideration) have been finalized, an exploration plan for the geoarchaeological investigations will be developed, focusing on those crossings with the most complete subsurface profiles. A representative number of measured profile drawings will be completed for these crossings and, if paleosols are observed, radiometric dating techniques may be used to better characterize the potential for buried archaeological resources. Based on archival research (documented in the responses to CEC Set One Data Requests Nos. 77 through 79) it is anticipated that there is a low preservation potential along these linear portions of the Project area, due to a landscape history dominated by an erosional regime. This field effort will be used to either confirm this conclusion or identify those areas that may have buried site potential, and may therefore require archaeological monitoring during linear construction activities.

The information from both of these field geoarchaeological efforts will be used to refine and/or modify those portions/depths of the Project area that were determined to have the potential for buried archaeological resources (see the responses to CEC Set One Data Requests Nos. 77 through 79) and thus require focused archaeological construction monitoring.